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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,370	04/19/2004	Sung-Hoon Kim	P57054	1039

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08/21/2007

EXAMINER
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LAI, DANIEL

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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08/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/826,370	Applicant(s) KIM ET AL.	
	Examiner Daniel Lai	Art Unit 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 10, 11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 10, 11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

#### **Response to Amendment**

Applicant's arguments with respect to claims 13 and 15 (previously claims 1 and 9) have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine an EV-DO network to the public and a private network as disclosed by Kil is found in the secondary reference (Julka, paragraphs 3 and 4).

In response to the argument that the references does not "teach or suggest the sharing of a public network data location register by a private data only system and a public network", Examiner respectfully disagrees because Kil does suggest sharing a HLR (public DLR) for location register by a private network (paragraph 73, where Kil discusses registering a mobile unit for private services). Kil lacks a data only system and was modified by Julka to provide an EV-DO system.

### ***Claim Objections***

Claims 2, 10 and 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims are depending upon latter claims and therefore fail to further limit preceding claims.

Claim 15 is objected to because of the following informalities: the recitation of "6om" at line 14 of claim 15 appears to be an error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 2, 10, 11, 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

MPEP 2173.05(q) II states the following:

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. \* > IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005); < Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) \* > (< claim directed to an automatic transmission workstand and the method \* of using it \* held \*\* ambiguous and properly rejected under 35 U.S.C. 112, second paragraph > ) < .

Claim 13 recites an apparatus and method steps in the same claim and therefore is indefinite. Claims 2, 10, 11 and 14 are rejected being depending upon the rejected claim.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 10, 11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kil (US 2001/0046859 A1) in view of Julka et al. (US 2002/0193110 A1, hereinafter Julka).

Regarding claims 13 and 15, Kil discloses a system and method (Abstract). Kil discloses a public wireless network having a public network data location register (DLR) and a public network access network control (ANC) (paragraph 28, where Kil discusses Home Location Register (HLR) and base station controllers (BSCs)). Kil discloses a private wireless network interfacing with the public wireless network (paragraphs 12 and 26; Fig. 1) and providing private wireless data service (claim 17, where Kil discusses mobile communication services and messages). Kil discloses a pANC connected to the public network ANC for providing a link between the private network and the public network (paragraph 26, where Kil discusses path between the pBTS and a BSC). Kil discloses parsing a received call connection request message to route the call connection request message to the public network or the private network when the call connection request message is received from a terminal (paragraph 12, where Kil discusses call request). Kil discloses receiving session information of a private terminal from the public network DLR connected via a dedicated line (see paragraphs 72-73, where Kil discusses location registration). Kil discloses allocating a traffic channel and setting an SVC for private network access based on the received session information when the received call connection request message is for private network address (paragraphs 73-76, where Kil discusses providing dedicated path for routing to a mobile station in the private network). Kil discloses a pAN\_AAA for receiving session information for any private terminal from the public network DLR via the pANC and authenticating the terminal based on authentication information contained in the session information (paragraph 74, where Kil discusses a private visitor location register pVLR for authentication purposes). Kil discloses communication service between a public and private network, but does not teach an EV-DO network. In an analogous art, Julka

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discloses the mobility management supports EV-DO networks (paragraph 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system for managing a public and a private network as disclosed by Kil with the EV-DO networks disclosed by Julka to provide higher bandwidth for communication between user and access network (Julka, paragraph 3 and 4). With respect to claim 15, Kil further discloses performing call processing in the private network based on the session information (paragraphs 74-77, where Kil discloses registration processes).

Regarding claim 2, Kil in view of Julka discloses the limitations of claim 13 as applied above. Kil does not teach an A14 interface, however, was modified by Julka to disclose an A14 signaling interface to allow transfer of session related information (paragraph 29). Julka discloses the mobility management supports EV-DO networks (paragraph 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system for managing a public and a private network as disclosed by Kil with the A14 interface disclosed by Julka to provide session information between public and private networks.

Regarding claims 14 and 16, Kil in view of Julka discloses the limitations of claims 13 and 15 as applied above. Kil further discloses determining whether a requested communication service is public or private and providing a corresponding mobile communication service (paragraphs 12 and 68).

Regarding claims 10 and 11, Kil in view of Julka discloses the limitations of claim 15 as applied above. Kil further discloses a data location register (paragraph 31, where Kil discusses Home Location Register (HLR) has subscriber location registration function and stores subscriber data (authentication information). Kil in additionally discloses the HLR provides

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information needed for call processing (paragraph 73 and 79, where Kil discloses registration and registration service end).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Larson (US 2003/0008649 A1) discloses centralized database for connecting public and private network.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Lai whose telephone number is (571) 270-1208. The examiner can normally be reached on Monday – Thursday, 9:00 a.m. – 4:00 p.m., EST.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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